PROJECT RESULTS IN TERMS OF IMPLICATIONS FOR TEACHING, EDUCATION OF SPECIAL GROUPS, AND RHETORICAL EXPRESSION

Science Fund of the Republic of Serbia
Program: IDEAS
Project *Structuring Concept Generation with the Help of Metaphor, Analogy, and Schematicity* (Project No. 7715934)
Acronym: *SCHEMAS*
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1. Introduction

The project bearing the acronym SCHEMAS deals with the ways in which image schemas – along with certain other parameters – as the building blocks of concepts in our minds can successfully be combined to produce more complex ideas in the mind. Similar principles of combination can be found in the "language" of metaphors, the "language" of music, or the "language" of visual sequences, among others. In the research underlying this project, we examined the process of concept formation in our minds – something that forms the basis of human cognition and thought, one of the fundamental capacities that distinguishes humans from other beings. We sought to uncover the dynamic mechanism that governs the creation of such "units" of thought when we speak figuratively, when we listen to or create music, or when we watch a sequence of images. By doing so, we can identify common elements across several different domains where thought processes manifest themselves – insights that could later be applied in efforts by experts to teach machines to communicate according to these principles, so that they can "understand" us just as we understand them.

The project is based primarily on the postulates of cognitive science and the theoretical framework of cognitive linguistics, although it also applies scientific tools from other related fields. During the study of the phenomena that were in focus, methodological procedures from corpus linguistics were used to examine large groups of metaphorical expressions, as well as musical phrases or visual sequences. In addition, members of the project team used psycholinguistic experiments in an

attempt to delve deeper into the human mind in order to uncover correlations and abstract principles that govern the creation of meaning in general − both in language and elsewhere.

The main goal of the research was to test and confirm the idea that image schemas, a term used to describe preconceptual constructs underlying our cognition, are not necessarily static in nature but can gradually develop, evolve, and interact with other schemas, thereby forming more complex conceptual structures.

The expected outcome of the work carried out within the SCHEMAS project on the aforementioned issues consists of clearly presented evidence − in several forms (through corpus analysis, theoretical considerations, experimental investigations, and more) − of the existence of mechanisms for the dynamic interaction of conceptual schemas (hence the project acronym). The project results have been presented to the wider academic community in the form of at least fifteen scientific papers published in reputable international journals and more than twenty presentations at international conferences.

From a scientific standpoint, the value of the project results can primarily be seen in those areas of cognitive science concerned with uncovering the patterns and characteristics of the human thought processes. The results show that the mechanism underlying such a dynamic relationship is not characteristic of language alone but represents a more general cognitive principle. At the same time, cognitive linguistics has been advanced to some degree by the recognition and confirmation that image schemas need not be viewed as static constructs, but rather possess developmental characteristics. Research in the field of multimodality has progressed thanks to results showing that the mechanism in question operates across three different systems (figurative language, music, and visual expression).

The concrete application of the project results lies in the possibility that everything produced as a contribution to the study of the given problem can, in various ways, assist creators of educational and pedagogical materials, as well as those working in other domains of science and creative practice. In the field of language education, the project results enhance our understanding of how concepts are acquired in the process of learning and teaching foreign languages in general. Based on the knowledge gathered through research and experiments, certain improvements could be expected in musical and audiovisual aids used in musical education and visual arts, especially in cases where special education is required. Furthermore, the field of rhetorical expression in communication could make use of some of our research findings to improve techniques for persuading others, particularly in the realm of propaganda messages in the media, politics, or economics.

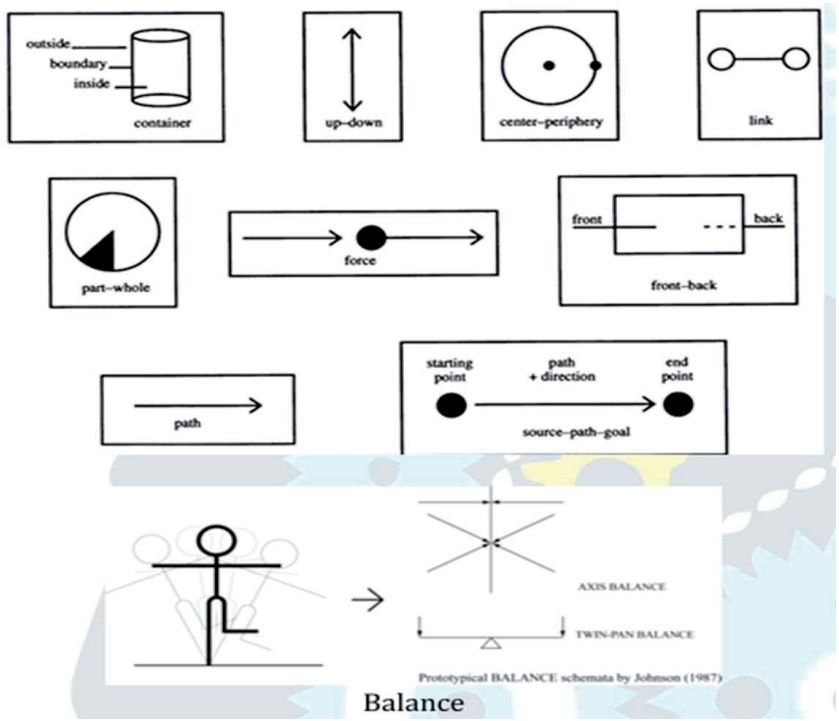
2. Image schemas

In cognitive linguistics, image schemas are viewed as specific subconscious, abstract patterns in the mind − conceptual sub-structures primarily based on our experience of spatial relations such as *inside–outside*, *up–down*, *near–far*, *center–*

periphery, *part–whole*, *front–back*; on the manipulation of physical objects (which involves force); and on movement through space (*source–path–goal*). In other words, the source of image schemas can be understood as our immediate sensorimotor and perceptual experience that arises from interaction with the external world.

The importance of image-schematic patterns lies in the idea that they underlie the concepts we use and therefore form the basis of human thought − an idea that goes back at least to the work of Immanuel Kant, that is, at least to the 18th century, if not much earlier. By studying them, we can better understand human thought processes and communication.

Some typical representations of image schemas are shown in the diagram below (the diagrams and images mentioned in this brochure were taken from Antović, 2024; Johnson, 1987, as well as from freely available online materials; translations of the English terms used in those diagrams are provided in the text below).



3. Image schemas and metaphoricity

What is of exceptional importance here is the insight that image schemas can also be viewed as fundamental elements of metaphor. In other words, the physical relationship represented in a schema can serve as an experiential basis for understanding abstract concepts. For example, a physical object may be located

inside or outside the boundary of a container. A key may be in a drawer, students in a classroom, a ball in a cupboard, a sofa in a room, soup in a pot; someone may be leaning on the outer wall of a house; glasses may be on or beside a printer; a cat may be in the basement, etc. In all these cases, there is a container − fully or partially bounded by its boundaries (drawer, pot, house, printer, basement) – in relation to which other physical objects (key, students, ball, sofa, etc.) occupy some position.

However, many abstract concepts are structured in a similar way. Just as a key can be in a drawer, an event can occur *in March*, or *in August*, or *in December*. In other words, non-physical − abstract − concepts, in this case those relating to temporal units (months of the year), are unconsciously understood as *containers within which* individual events can be located. Similarly, someone may be *in a mentally difficult state*, or *in danger*, *on the threshold of a scientific discovery*, *under great (psychological) pressure*, *in a (romantic) relationship*, etc.

Likewise, the action of a force can be understood both literally and figuratively (e.g., *The flood weakened the foundation of the house* and *Such a decision undermined the unity among the members of that association*).

The same applies to the concept of balance − a force such as an earthquake may *disrupt the balance of a building*, just as an event may, figuratively speaking, *throw a person off balance*.

The same holds for the concept of a *link* or *connection*. For instance, a twig of an oak tree used as a *badnjak* may be tied to a bit of straw with a string, just as two people may be emotionally connected.

However, what particularly stimulates interest in image schemas within cognitive science is the fact that they not only form the basis of a large part of language, that is, not only appear in linguistic material, but can also be manifested − and serve as tools of conceptualization − in numerous other domains of human behavior and activity.

For instance, people, based on everyday experience, come to the conclusion that what is *up* is generally *good*, while what is *down* is generally *bad*. For example, a farmer who harvests a very large quantity − a heap − of wheat or other grains associates that large quantity with something *good* − he knows that with these grains he will be able to feed both himself and his domestic animals, such as poultry or pigs, and perhaps even sell part of the yield to earn income. Conversely, if the heap of grain obtained after the harvest is relatively small/low, this would threaten both his own survival and that of his domestic animals. In this case, what is *small* or *low* is experientially associated with something *bad*. Similarly, if a person is healthy and upright, that person can easily run and engage in various activities, such as farming and animal husbandry, and generally be active in different areas of life. Therefore, uprightness (i.e., the *up* position) is experientially associated with something good. Conversely, if a person is ill, even temporarily, that person is typically confined to bed, in a *down* position, which, based on experiential reasons (typically unconsciously), is associated with something bad (hence expressions like *fall into a coma*).

This association can be observed not only in language − when, for example, various social relationships are structured according to the pattern *up* = *good*, *down*

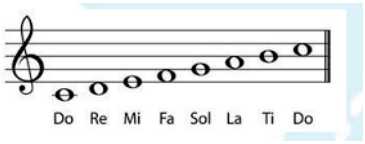
= *bad* (e.g., *He is at the head of the company*, *She has advanced high on the social ladder*, *He has fallen on hard times*) – but also in many other forms of human behavior that are not necessarily linked to language. For instance, a monarch's throne is typically placed on an elevation, even if only a few steps higher, rather than in a depression or a pit. Similarly, respect for the deceased is shown by looking downward rather than upward, sometimes by kneeling (e.g., at a grave). Executive offices in an organization are typically located on higher floors, often on the top floor or in a distinct elevated section. Depictions of Jesus Christ, and later of the apostles, are typically placed in the highest positions (at the top of the iconostasis, on the top of a dome, etc.) in Christian religious buildings, as illustrated in the images below (Antović, 2024; Rasulić, 2004).

Thus, the *up–down* schema, like all other schemas, is applied to numerous metaphorical or figurative concepts that share the same abstract structure. In other words, our cognitive system reduces the perception and proprioception of human bodily activities to a rudimentary image-schematic form of relation, which is then manifested not only in language but also across a wide spectrum of human action.

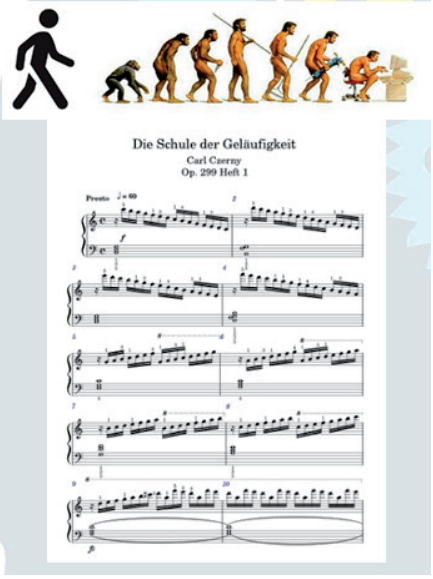
4. Image schemas in music and other fields of human thought and activity

Our goal in the following sections will be to focus in particular on how the insights mentioned above, as well as some additional similar insights that we will also present, can be applied, especially in the field of music. At the same time, we will continue to refer to examples that do not necessarily belong exclusively to music (or language), but also to various other forms of human activity, in an effort to emphasize once again the pervasive presence of image schemas in the patterns of human thought and action across different spheres of life.

For example, the aforementioned *up–down* schema is, of course, projected onto vertical systems of musical notation and perception, significantly contributing to the ubiquitous metaphor of musical relationships and motion.

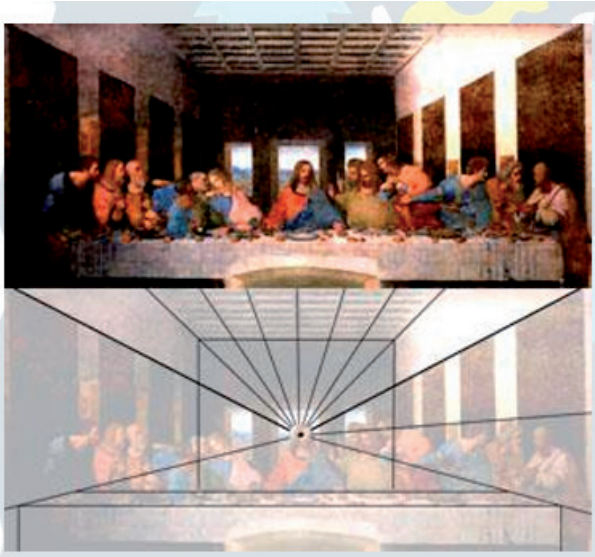


Similarly, at the core of the *path* schema lies the physical traversal of actual distances, which is then mapped onto numerous forms of human activity. For example, it can be applied to how we perceive the path of human evolution, or, in music, to how musical passages are organized on the staff, such as in the études of Carl Czerny (1791–1857), for instance his composition *Die Schule der Geläufigkeit* ("School of Velocity"), illustrations of which are provided below.



Finally, the importance of the *center–periphery* relationship may arise from the significance of the central parts of our body for survival, such as the heart, and, in that sense, the comparatively lesser importance of certain peripheral parts of the body (such as nails).

The concept of centrality versus peripherality of objects is also important metaphorically, as can be seen in the way the famous painting *The Last Supper* by Leonardo da Vinci is organized.



In music, of course, this is reflected in the hierarchy of pitch and the centrality of certain chords relative to others, for example, the tonic triad in relation to the dominant.

The project within which this brochure is being produced adds another aspect to these well-known concepts: the idea that schemas can be dynamically scaled in intensity and in real time (Antović, Jovanović, Figar, 2024; Pavlović, Janić Mitić, Mitić, 2024).

Here, we will briefly show how this can be applied to the schemas of *force*, *path*, *balance*, *connection*, and *containment*, first in language, before returning to music.

For instance, the relative intensity of force can be represented by the symbol F and a combination of minus and plus signs. Examples from language, arranged from least to greatest perceived force, are as follows: *touch/tap* <F--->, *pat* <F->, *splash* <F->, *hit* <F>, *strike strongly* <F+>, *strike with full force* <F++>, *reduce to dust and ashes* <F+++>.

For scaling the *path* schema, the length of the distance covered can be indicated (typically without negative values), for example: *The EU entry is uncertain* <P>, *Serbia has made some progress toward the EU* <P+>, *On the way to Brussels* <P++>, *The letter has arrived* <P+++>.

For scaling *balance*, one can indicate its mere presence, as well as a greater or lesser degree of disruption, if any, as in the following examples: *It is a delicate act of balancing* <B>, *This may lead to destabilization of the country* <B->, *Their relations were particularly disrupted after…* <B-->, *Polarization due to the war in Ukraine is enormous* <B--->.

For scaling *connection/linkage*, one can indicate the closeness or distance (physical or metaphorical) between two or more entities, as in: *Jovan and Marija are two different worlds* <L--->, *The country has ended military cooperation with Russia* <L-->, *If he were to hand over the illegally obtained money…* <L->, *They are together* <L>, *They became very close* <L+>, *They became inseparable* <L++>, *This connected them inseparably* <L+++>.

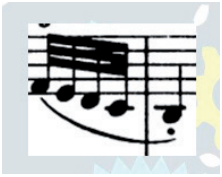
For scaling *containment*, one can indicate the degree to which an entity is located within a physical or metaphorical container, as in: *He took the documents out of the drawer* <C--->, *That country will be integrated into the EU* <C+++>.

In language, such intensities are interpretive; that is, drawing conclusions about the strength of an image schema requires referential semantic processing. In other words, from experience, we need to understand that, in the example *Jovan and Marija are two different worlds*, a world is an object that is inherently very large. Therefore, we interpret the example by recognizing that not only is there no connection between Jovan and Marija, but also that their distance − whether emotional or in some other sense − is extremely great.

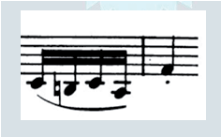
In music, we find a similar phenomenon, but it is easier to locate because it can be observed in the formal structure of the musical notation or in the parameters used to measure the characteristics of the sound stimulus.

Thus, in music, L- suggests a small change from a more connected to a less connected articulation in terms of performance technique, for example, when *legato*

(tones played smoothly without interruption) transitions to *portato* (tones that are slightly shortened and played in a somewhat detached manner). Such a transition is illustrated in the diagram below.



On the other hand, L-- indicates a much more noticeable change, for example, from *legato*, as described above, to *staccato* (where the actual duration of each note is significantly shortened and each note seems to represent an individual sound impulse). This, of course, can be easily observed in the score based on the notational symbols or measured from the sound stimulus. This transition is also illustrated in the diagram below.

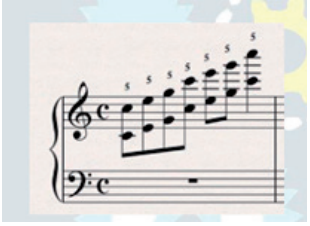


Similarly, the intensity of force − that is, the strength/loudness/intensity of the performance of a musical piece − can be determined. As a reminder, the categories of performance intensity and the corresponding standard dynamic markings are as follows:

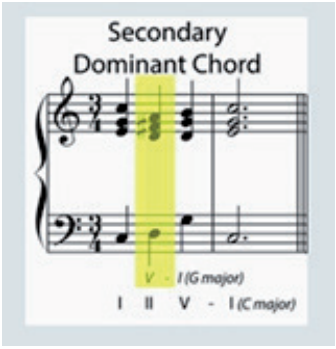
- as soft as possible (Italian: *pianissimo possible*, *ppp*)
- very soft (Italian: *pianissimo*, *pp*)
- soft (Italian: *piano*, *p*)
- moderately soft (Italian: *mezzopiano*, *mp*)
- moderately loud (Italian: *mezzoforte*, *mf*)
- loud (Italian: *forte*, *f*)
- very loud (Italian: *fortissimo*, *ff*)
- as loud as possible (Italian: *fortissimo possible*, *fff*)

In our notation, this gradient from the softest to the loudest possible performance intensity would range from <F---> to <F+++>.

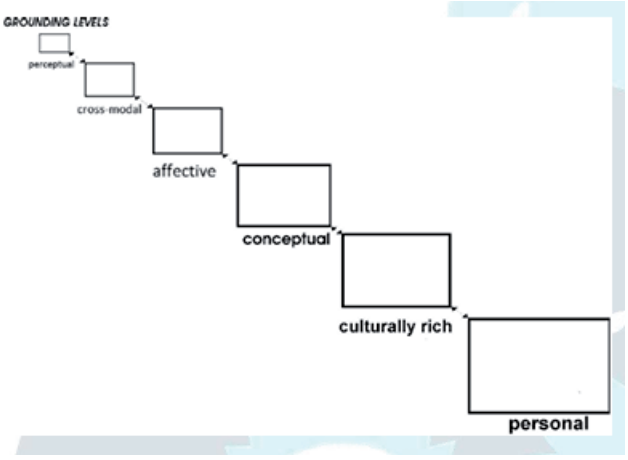
Additionally, in music, one can also speak of *path*, that is, a greater or lesser number of notes played per unit of time. For example, a leap of one octave, as in the example below, could be represented as <P++>.



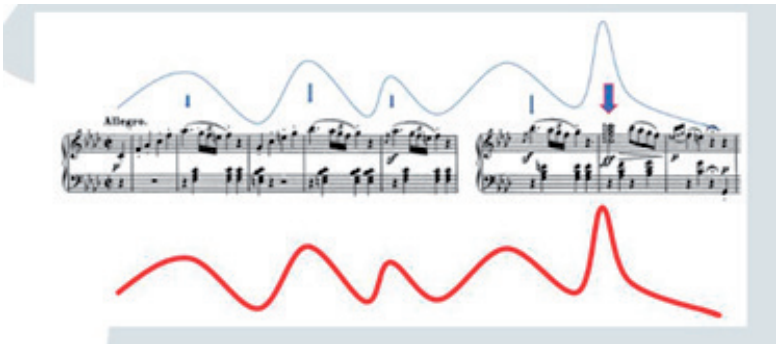
In music as well, one can also speak of *balance*, that is, its lesser or greater disruption. For example, in the illustration below, we can see one consonant chord and one strongly dissonant chord, which is the central (tonic) chord and the secondary dominant, which in our notation can be represented as <B->.



Broadly speaking, this schematic understanding of music constitutes only one layer of musical interpretation. Namely, Antović (2022) introduces six hierarchical and partially recursive (repeating) levels of grounding musical meaning: the formal-perceptual, the aforementioned image-schematic, the affective, the conceptual, the cultural, and the personal/individual levels, as illustrated in the diagram below.

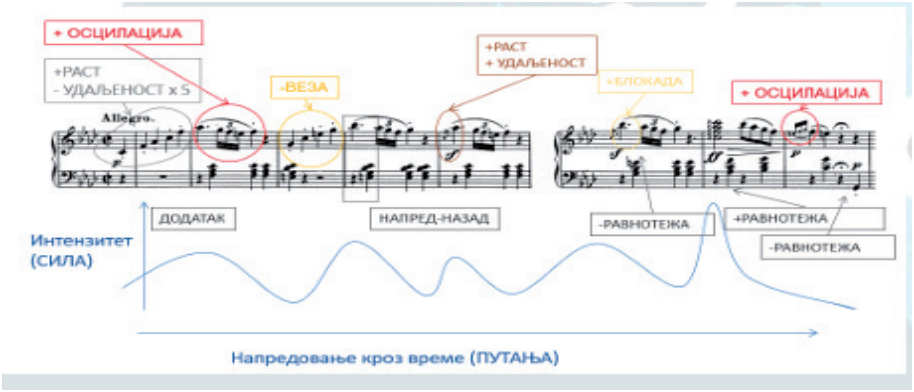


As an example, we can take the beginning of Beethoven's first piano sonata in F minor. We can then ask how the process of meaning construction unfolds in this passage. It certainly seems reasonable to first observe the levels of formal energy change derived from the sound stimulus. In other words, one can initially identify the relative peaks in the structure, including the final peak of the passage, which we will analyze below from the musical work, showing the strongest musical energy.



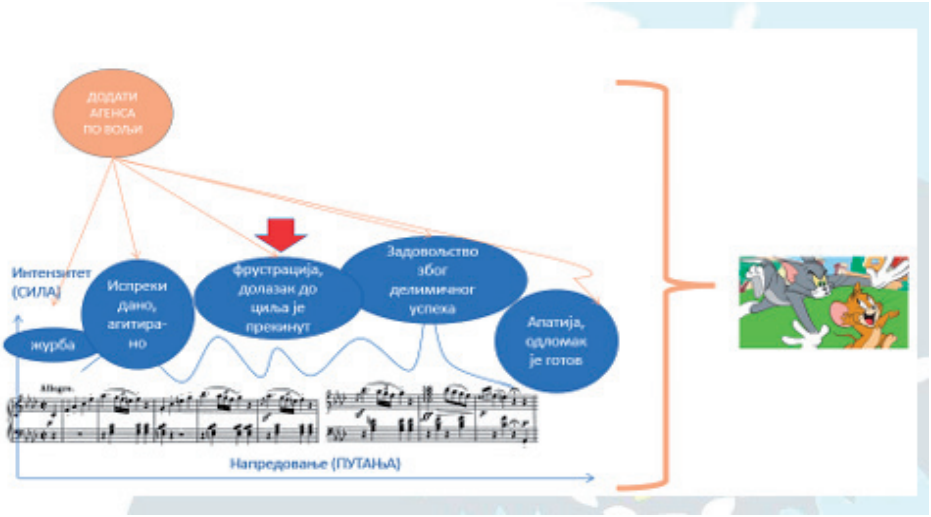
In the next step, which concerns interpretation based on compositionally immanent image schemas, a distinction can be made between higher- and lower-order phenomena. At the highest level, viewed horizontally, the entire musical passage progresses through time, that is, it has its flow, creating an image-schematic *path*. Viewed vertically, one can say that the musical flow rises and falls, that is, increases and decreases between points of greatest energy. This establishes the concept of musical *intensity* or *force*, which refers not only to simple forte articulation but also to more or less tense harmonic connections or articulatory intensities. This approach can be considered the first step toward making the lived musical experience easier to interpret.

Then, at a more specific level, in the given musical passage, one can identify specific image schemas such as *elevation*, *verticality/rise*, *distance*, *oscillation*, *present* or *absent connections*, *blockages*, *supports*, and *gestalts of forward and backward movement*, as illustrated in the diagram below for the same musical passage.

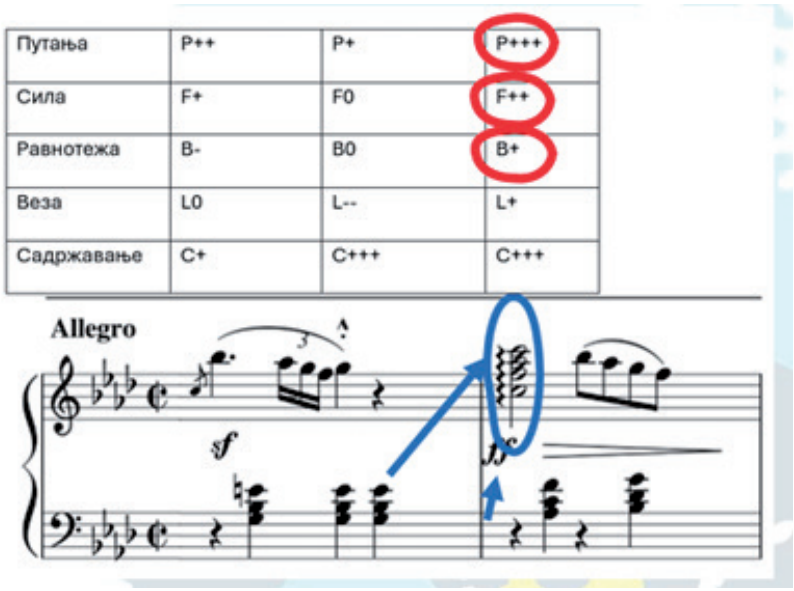


In the next steps, which concern the affective, conceptual, cultural, and individual levels, one can reflect on the affective and emotional, conceptual, and social aspects of meaning construction related to a given passage or the entire musical work from which the passage is taken. In this way, affective qualities can be attributed to the musical content, for example, frustration, relief, anger, pleasure, and so on.

Next, referential scenarios can be constructed. For instance, one might ask whether a particular musical piece is suitable as the background music in a cartoon where Tom the cat is trying to catch Jerry the mouse. Finally, one can provide descriptions of the perceived musical experience that are based on our immanent knowledge and personal experience. This is illustrated in the diagram below.



Another innovation in this project on image schemas is the attempt to formalize these levels of musical interpretation. For example, let us consider the point of highest musical energy in the given Beethoven excerpt, and how we even arrived at the interpretation of the dynamic change in musical energy that occurs during the perception of the piece. One possible approach is to examine formal parameters inherent to individual musical notes and assign positive and negative values corresponding to increased or decreased levels of intensity. Thus, if we take into account the number of notes in a chord, the duration of the notes, interval leaps, volume, and so on, as individual factors, each contributing one point to the increase in dynamics, we obtain energy values, of which the highest, in the last three previously presented diagrams, occurs near the end of the musical notation. In other words, there is also a mathematical support for the perception of variable energy observed in the piece. This is illustrated in the diagram below.



In the same way, we can attempt to formalize the schematic structure beyond the purely perceptual level. For example, in addition to the overall increase and decrease in energy levels, we can track the onset and change in intensity of at least five image schemas: path, force, balance, link, and containment. Thus, in the given excerpt, we can see that the (vertical) path is most pronounced in the F minor chord, as it includes a leap from E4 in the bass clef to C6 in the violin clef, i.e., more than an octave and a half, which in our notation can be marked as <P++>. In addition, the fortissimo on this chord increases the intensity/force, which we can represent as <F++>, while the balance is positive (in our notation <B+>), since we have a tonic chord, even though it is not particularly intense or forceful. Overall, the strongest presence of schemas is again found in the structurally most important chord, providing the climax of the segment.

During the project in which this brochure was produced, special attention was devoted precisely to such formalizations in large linguistic and musical corpora.

5. Image schemas and pedagogical work

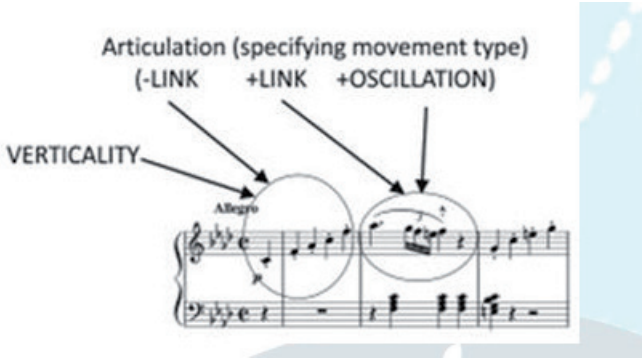
Thus, we arrive at the consideration of whether the aforementioned viewpoints and concepts can also be used for pedagogical purposes. Our opinion is that not only can they be used, but that referencing them can significantly enhance teaching. We will attempt to support this position with some practical suggestions.

For example, within the context of children's music education, real-world scenarios can be creatively developed to naturally introduce how musical structure unfolds. A teacher could first creatively prepare children to understand and use the described concepts. This could be done by asking children to talk, for instance, about balance. During this, no musical background would be used. For example, the

teacher could ask what balance means, how relationships of balance can be applied using the example of a jeweler's scale or another (analogous) scale, what is required for them to maintain balance if standing on one leg, how balance is lost, and what happens when someone truly loses balance – and ask the children to demonstrate all of this using their own example.

Additionally, the discussion could focus on different ways of moving along a path – for example, walking slowly, running, hopping continuously without pauses, or hopping with pauses between jumps. The children could then be asked to demonstrate these various forms of movement themselves. Similarly, the conversation with the children could first explore how they would express a strong force, for instance, when needing to move a heavy object or when they feel angry.

In a second step, the children could be asked to verbalize scenarios that incorporate the relevant image schemas. As in the first step, there would still be no background music. However, if the first melody they would later listen to included, at the beginning, a transition from lower to higher notes played in a detached or interrupted manner, before reaching the first peak of melodic intensity that prevents equilibrium, followed by oscillation (as is the case with the music illustrated in the diagram below), the task could be for the children to imagine a scenario that includes such scenes.



Of course, the children would provide different narratives during this activity. For example, one child might tell a story about a cat climbing stairs quickly and in a choppy manner to catch a mouse, only for the mouse to escape by wriggling out of the cat's paws, which would correspond to oscillatory movement. Immediately after this, the third step would follow, which involves playing the musical excerpt. In the fourth step, the children would be asked to identify the moments in which a particular image-schema concept appears. This would be done with verbal support from the teacher – not in the sense of giving instructions on identifying examples of specific image schemas, but, for instance, by asking them to raise their hand when they hear the cat trying to catch the mouse or when the mouse wriggles free from the cat's paws, and so on. Finally, in the fifth step, the children would be asked to perform the story they created from the music they heard and verbally processed, to the best of their abilities.

This is, of course, a fully embodied activity in which children create a kind of bodily notation for the music they are exposed to. The main advantage of this approach is the early combination of music and a form of dance, pedagogically oriented toward understanding relevant musical concepts in a fun and friendly, yet structured, environment. Moreover, this approach is assumed to work well in inclusive music classrooms, as children with visual impairments could participate fully in such activities. In fact, visually impaired children could make this activity even more engaging because their understanding of musical movement does not have to be horizontal-vertical; it could, for example, follow the direction of a clock's hands or describe the notes they hear as "large" and "small," as shown in some studies (e.g., Antović, 2009). Similarly, children with hearing impairments could benefit from an embodied response to music they cannot physically hear, or hear less clearly, by following the movements of their peers and immersing themselves in the musical structure through their own bodily movements. An additional benefit of this approach in music education, especially for children, would be the use of techniques for free conversation and reflection, aimed at enhancing children's imaginative and narrative skills.

The concepts presented above could also be applied in (foreign) language teaching. For example, in the case of the orientation image schema *up–down*, it could be applied in foreign language lessons in the following way: first, vocabulary belonging to the relevant semantic field would be selected. In the case of English, this could include lexemes such as *upper, top, bottom, hill, take off, plummet, soar, rise, fall, set, ground, sky, ascend, descend*, etc. Next, exercises could be created in which students are asked to insert the appropriate form of a given lexeme (provided in parentheses) into a sentence.

It could look like this:

Task 1: Literal Sense

1. The airplane ___ into the sky. (take off)
2. She climbed the ___ of the mountain. (top)
3. The ship sank to the ___ of the ocean. (bottom)
4. He placed the vase on the ___ shelf. (upper)
5. The balloon ___ into the air. (rise)
6. The rocket ___ into space. (launch)
7. The eagle ___ high above the mountains. (soar)
8. The submarine sank to the ___ of the ocean. (depth)
9. The rocket ___ into the atmosphere. (ascend)
10. The sun ___ behind the mountains. (set)

Task 2: Metaphorical Sense

1. Her career really ___ after she graduated. (take off)
2. He's been feeling on ___ of the world lately. (top)
3. After the news, she felt at the ___ of despair. (bottom)
4. His spirits were in the ___ region. (upper)
5. Her mood ___ after receiving the good news. (rise)
6. His spirits ___ when he heard the news. (launch)
7. Her confidence ___ after receiving praise. (soar)
8. She felt ___ of despair after the loss. (depth)
9. The company's success ___ to new heights. (ascend)
10. His mood ___ after the challenging day. (set)

This approach is similar to the one used in Wright (1999), albeit with different types of metaphors rather than orientation-based ones. Elements of this way of organizing didactic material are also present in the phrasal verb dictionary *Macmillan Phrasal Verbs Plus* (published in 2005). One of the most significant aspects of the organization of this dictionary is the special sections for various phrasal particles, including particles such as *down* and *up*. In these sections, the development of different figurative meanings of such particles from their more basic meanings is presented, which we have already touched upon above, along with accompanying exercises.

6. Additional research in the field of language teaching

Using the associative method with students of Serbian Studies and English Studies at the Faculty of Philosophy in Niš, Aleksandra Janić and Marta Veličković (2023a, 2023b, 2023c) focused on recent noun and adjective Anglicisms excerpted from the *Serbian Dictionary of Recent Anglicisms* (2021) on the one hand, and their established Serbian counterparts on the other. In other words, the recent Anglicisms and their established counterparts were presented to philologically oriented participants as stimuli, and the lexeme-responses obtained through associative methods were analyzed. The results obtained are significant for teachers of both English and Serbian, as native and foreign languages.

Regarding recent noun Anglicisms and their counterparts (2023a; 2023c), the corpus included 40 pairs of examples such as *browser/претраживач*, *office/канцеларија*, *party/журка*, *popcorn/кокице*, *reseller/препродавац*. After analyzing the types of associative responses to recent noun Anglicisms compared with their Serbian counterparts (2023a), the following Anglicisms emerged as the most acceptable: *popcorn, gift, file, jackpot, cash, sticker*. It was shown that native Serbian speakers provide responses of a paradigmatic type to recent noun Anglicisms as stimuli. On the other hand, the number of activated semantic frames and/or idealized cognitive models is smaller for recent Anglicisms than for their established Serbian counterparts. Strong tendencies were observed for the full integration of the analyzed recent noun Anglicisms into the lexical system of the Serbian language. Namely, considering the influence of foreign culture, the analyzed recent Anglicisms will, through various connotations, contribute to the mental lexicon of Serbian speakers. Therefore, the acceptability of recent Anglicisms should not be reduced solely to a criterion of necessity but should be represented on a scale.

Based on the analysis of lexeme-responses in the form of synonyms, hyponyms, or hypernyms relative to the recent Anglicism as a stimulus, it was observed that the meaning of recent noun Anglicisms and their established counterparts provided in the *Serbian Dictionary of Recent Anglicisms* (2021) is not always perceived as completely synonymous; there is room for meaning specification. It is also noteworthy that linguocultural elements were observed for 66.25% of the lexeme-stimuli, with foreign cultural influence present in Anglicisms and domestic cultural

influence in their established Serbian counterparts as stimuli.

When comparing the types of lexeme-responses between Serbian Studies students and English Studies students, the following tendencies emerged: 1) English Studies students more frequently produced hapax synonymous responses to recent Anglicisms as stimuli, which aligns with their higher level of English proficiency; 2) Serbian Studies students were more inclined to provide general responses, i.e., hypernyms relative to the given stimulus, whereas English Studies students tended toward hyponyms; 3) the responses of English Studies students were more often encyclopedic in nature compared to those of Serbian Studies students, leading to the conclusion that the level of English proficiency influences both the degree to which Anglicisms are accepted and how they are interpreted and understood.

Regarding recent adjective Anglicisms and their Serbian counterparts (2023b), the corpus included examples such as *асистиран/потпомогнут*, *изгоинг/лежеран*, *кјут/симпатичан*, *промптан/брз*, *релакс/опуштајући*. From the main conclusions, the following points are highlighted: 1) the most frequent responses consisted of nouns forming a syntagma with the stimulus, followed by lexemes connected to the stimulus in terms of encyclopedic knowledge, and then those related through synonymy with the stimulus; 2) although all analyzed recent Anglicisms had an established equivalent in Serbian, they were not equally familiar to the participants nor equally acceptable; 3) recent Anglicisms that, in the study, showed a high level of familiarity/acceptability are characterized by synonymy/near-synonymy or by specific usage patterns that introduce new meanings into the Serbian language.

As expected, there were more instances of missing responses when the stimulus was a recent Anglicism than when it was its established Serbian counterpart, indicating a low level of familiarity/acceptability for the analyzed recent adjective Anglicisms. Regarding the dominant part of speech among the responses, nouns predominated, followed by adjectives. It is precisely in the syntagmatic combinations of the analyzed adjectives and the lexeme-responses in the form of nouns that the contextually specific meanings of the Anglicisms become visible. Additionally, usage patterns were more clearly defined for established Serbian counterparts than for the recent Anglicisms. Serbian language majors tended to establish syntagmatic connections with the lexeme-stimuli through their associative responses, whether the stimuli were recent Anglicisms or their counterparts, whereas English Studies students, in response to Anglicisms as stimuli, more frequently produced synonyms, nouns forming syntagmatic combinations with the stimulus, hyponyms, and antonyms.

7. Image schemas and public discourse

Finally, we would like to briefly draw attention to the use of image schemas in public discourse, for example in politicians' speeches, as part of a broader, typically unconscious reliance on them in everyday speech and writing, as well as in various types of language use.

For example, whenever people talk about whether a country is or is not "on the right path," whether it is or is not on the road toward the EU, or whether a certain party or coalition will move toward the goal of achieving a decisive electoral victory over political opponents by a certain point in time (e.g., the start of a new year, upcoming elections), the *path* schema emerges.

Similarly, when one says, for instance:

- that a smaller or larger part of the world is characterized as a region of poverty and misery, or a region marked by a large outflow or influx of population;
- that it appears a leader is in an invisible cage accessible only to the most loyal, which might attempt to explain someone's lack of understanding of the difficulties faced by ordinary people;
- that a party will enter parliament or leave the government, and so on;

one can speak of the presence of the *containment* schema.

When someone talks about:

- having difficulty defeating their political opponents, or perhaps losing to them by a narrow margin;
- that it requires great effort to bring about a change in public opinion on a certain issue;
- that a presidential candidate has demolished someone's argument in a live televised debate, and so on;

the *force* schema appears.

Whenever people talk about:

- the need to achieve a balance in politics between what is necessary and what is possible;
- a disruption in the balance between the executive, legislative, and judicial powers, and similar situations;

we can also speak of the *balance* schema.

All in all, image schemas, as a preconceptual foundation of language (but, as we have seen, not only language), are in fact ubiquitous. It is up to each individual to determine for themselves how meaningful, justified, and purposeful their use is − especially in the realm of politics − for a better understanding of the speaker's message, and to what extent it may contain elements of manipulation.

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